communicating means for automatically communicating said level of insurance risk.

8. The method of evaluating insurability of at least one individual in claim 7, wherein said step of gathering information comprises the steps of:

providing said individual with a questionnaire; and

receiving said individual's answers from said questionnaire.

REMARKS

In response to the Office Action mailed January 13, 1994 (Paper No. 5), claim 1 has been amended and claims 2-10 have been added. Accordingly, claims 1-10 are pending in this application. Reconsideration of all rejections is respectfully requested.

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph, for being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 was amended and is believed to be in proper and allowable form. Accordingly, this rejection has been overcome and should be withdrawn.

Claim 1 stands rejected under 35 U.S.C. § 101 as being directed to a method of doing business. Reconsideration of this rejection is respectfully requested.

In the Office Action, it was noted that mere recitation of a computer is not sufficient to render this claim statutory. Applicants respectfully disagree.

Claim 1 and the additional claims added in this amendment as well as the underlying specification fully define computer structure, connectivity and operations that apply a business method. The amended and added claims specifically indicate the data input, storage, processor and communication elements of the invention, thereby making it clear that a computer system to effectuate a method of doing business is claimed and not the method of doing business itself. Recitation of these and other elements clearly brings the claims within the scope of 35 U.S.C. § 101 and in line with the claims that were found to be acceptable by courts for other computer systems implementing business methods.

Applicant briefly discusses the appropriate legal test applied by courts in determining whether claims are considered methods of doing business under 35 U.S.C. § 101, and why the claims meet this test.

First, the Examiner is correct in her assertion in the first Office Action that a method of doing business cannot be patented under 35 U.S.C. § 101. The caselaw cited in the first Office Action also supports this proposition. However, the Office Action fails to take account of more pertinent caselaw to the instant claims. Specifically, the invention claimed herein recites a computer system that implements, in part, a business method.

Courts view computer systems or computer programs as a machine, defined as an appropriately programmed digital computer, which is the means for carrying out a business process rather than as the business process itself. Chisum, Patents: A Treatise on the Law of Patentability, Validity and Infringement, § 1.03[5] (1992). Therefore, computer programs that meet all other requirements of 35 U.S.C. § 101 (such as novelty and usefulness) can be patented even if the products they produce constitute a method of doing business. Id.

In analyzing whether a computer system is merely a business system, cases favor patentability as long as the operations of the computer system meet § 102 and § 103 requirements. Other more recent court decisions, not cited in the first Office Action, fully support this proposition. See, e.g., Application of Johnston, 502 F.2d 765 (C.C.P.A. 1974),

rev'd on other grounds, Dann v. Johnston, 425 U.S. 219 (1976); Application of Toma, 575 F.2d 872 (C.C.P.A. 1978); Application of Phillips, 608 F.2d 879 (C.C.P.A. 1979); Paine, Webber v. Merrill Lynch, Pierce, 564 F. Supp. 1358, 1369 (D. Del. 1983).

The invention at issue in Johnston was an automatic financial record-keeping system utilizing a digital computer. The apparatus claims included inter alia elements such as a data processor, input and output devices, and a control system with means for directing the processing. Johnston, 502 F.2d at 767. These elements are found in the present claims.

In Johnston, the Examiner initially rejected the claims under 35 U.S.C. § 112 and 35 U.S.C. § 102. The Board of Patent Appeals and Interferences (the "Board") did not sustain the rejections. Instead, under Rule 196(b) of the Rules of Practice in Patent Cases, the Board entered a new rejection under 35 U.S.C. § 101. Id. at 768.

The Board's § 101 rejection was premised upon two U.S. Court of Customs and Patent Appeals cases which held that computer-related inventions were statutory subject matter if they were within the "technological arts." See In re Foster, 438 F.2d 1011 (D.C.P.A. 1971); In re Musgrove, 4341 F.2d 882 (C.C.P.A. 1970). The Board inferred from those cases that computer-related inventions extending beyond the field of technology were not

within the "technological arts" and hence non-statutory. The Board concluded that a computerized financial record-keeping system was not within the "technological arts" and was unpatentable subject matter. Id. at 769.

The U.S. Court of Customs and Patent Appeals reversed, finding that record-keeping machine systems for use in the banking industry clearly fell within the rubric of "technological arts." Id. at 771.

The Supreme Court reversed in Dann v. Johnston, 425 U.S. 219 (1976). While describing the various positions regarding the patentability of the invention under § 101, the Court's reversal rested entirely on an obviousness rejection under 35 U.S.C. § 103. Id. at 224-25. Thus, the U.S. Court of Customs and Patent Appeals § 101 analysis remains intact.

The invention at issue in Toma involved a method of operating a digital computer to translate languages--in other words, a business method. The method involved three phases, a dictionary look-up phase, a syntactical analysis phase, and a synthesis phase. Toma, 575 F.2d at 874.

The Examiner rejected the claims under § 101 because a computerized method of translating did not fall within the "technological arts." Id. at 877.

The U.S. Court of Customs and Patent Appeals reversed, finding that the claimed method is in the "technological arts" in that it is a method of operating a machine. Furthermore, the Court held that in ascertaining if an invention is statutory subject matter, the "inquiry must focus on whether the claimed subject matter (a method of operating a machine to translate) is statutory, not on whether the product of the claimed subject matter (a translated text) is statutory, not on whether the prior art which the claimed subject matter purports to replace (translation by human mind) is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art." Id. at 877-78.

The invention at issue in Phillips involved a computer apparatus and process for preparing printed architectural specifications, a business activity. The apparatus claims recited a system for preparing the specifications which included "Specification Data File means", "Specification Index File means", and a "Programmed Data Processor". Phillips, 608 F.2d at 880.

The Examiner, citing Gottschalk v. Benson, 409 U.S. 63 (1972), rejected the claims as non-statutory subject matter under 35 U.S.C. § 101 because the invention could only be practically applied in connection with a computer. Id.

The Board affirmed the Examiner's rejection, stating that computers operate mathematically, and thus the claims are directed to an "algorithm" in the Benson sense of the term. The Board further agreed that because the practice of the algorithm had only practical use in computers, the claims wholly pre-empted the algorithm. Id. at 881-82.

The U.S. Court of Customs and Patent Appeals reversed. The Court stated that the Board's position -- that any claim directed to computer-related inventions is directed to an "algorithm" as envisioned in Benson -- was erroneous. The Court further found that the claims recited no Benson "algorithm," concluding that the claims were patentable subject matter under § 101. Id. at 882-83.

The Paine, Webber case follows the reasoning of the Johnston, Toma and Phillips courts. The invention at issue in Paine, Webber was Merrill Lynch's Cash Management Account program which combined three commonly offered financial services onto a computer system. Merrill Lynch brought an infringement suit against Paine, Webber. Paine, Webber requested the court to declare the underlying patent, U.S. Patent No. 4,346,442 (the "Musmanno patent") invalid under 35 U.S.C § 101 because it is "nothing more than [a] familiar business system[]." Paine, Webber, 564 F. Supp. at 1369.

Claim 1 is illustrative of the claims set forth in the Musmanno patent. Claim 1 claims a system for processing and supervising a plurality of composite subscriber accounts. The system includes brokerage account data file means, manual entry means for entering short term investment orders, data receiving and verifying means, means responsive to said brokerage account data file means and said data receiving and verifying means for generating an updated credit limit for each account, short term investment updating means, and communicating means. Elements comparable to these are found in the present claims including among others, an entry means, a communicating means, and an evaluating means.

In ascertaining the patentability of the Musmanno patent subject matter, the Paine, Webber court, finding that the Musmanno patent claims were similar to those held to be patentable in Johnston, Toma and Phillips, stated that in the absence of a Benson algorithm, "the product of a computer program is irrelevant, and the focus of analysis should be on the operation of the program on the computer." Id. at 1369. The court allowed protection for the computer system because "the claims allegedly teach a method of operation on a computer to effectuate a business activity" even though the business activity itself "would be unpatentable if done by hand." Id.

The trilogy of caselaw from the U.S. Court of Customs and Patent Appeals as well as the Paine, Webber case articulate and resolve several propositions at issue here. The first is that computer systems are patentable subject matter under 35 U.S.C. § 101. The second is that computer systems that perform functions outside of the "technological arts" -- i.e., such as business methods -- are no less patentable subject matter under § 101. Finally, in determining whether a computer system is within the "technological arts," the focus must be on whether the claimed subject matter is statutory and not on whether the resulting product or the prior art to be improved upon is statutory.

The focus in this case, therefore, should be on whether the computerized system for lifestyle risk evaluation and insurability determination is statutory and not on whether previous methods for evaluating lifestyle risk and insurability are statutory or whether the result is statutory.

Similar to the computer systems claimed in Johnston, Toma, Phillips and Paine, Webber, the claims for the current invention teach a method of operation on a computer. This is clear in claims 1-10, all of which envision a "computer system" to implement an insurability determination program.

Furthermore, the specification clearly supports the recitation in the claims that can be characterized as a "method of operation on a computer to effectuate a business activity." Pages 12-31 of the specification as well as FIG. 1 clearly describe a computer system to effectuate the business goal noted in the summary of the invention. Therefore, the specification also meets the Paine, Webber, Johnston, Toma and Phillips test of teaching a computer system operated to effectuate a business goal. Also, while the insurance program, if carried out by hand, may not be patentable, it is patentable as a computer system which effects the operation of the computer.

Furthermore, in light of the Amendments to claim 1 and its similarity to the subject matter of prior patent applications which have been found to define the structure of a computer system (and thus ultimately patented), it is clear that this invention constitutes a computer operated by a unique computer program. Specifically, and as previously noted, the Paine, Webber court determined that the Musmanno patent, which claims a securities brokerage-cash management computer system, was protectable under 35 U.S.C. § 101 and did not constitute a method for doing business.

Claim 1 of Musmanno recites in pertinent part (i) means for storing information regarding subscribers to the system, (ii)

means for entering investment orders and charge card and check transactions, (iii) means for processing which generate updated credit limits and generate and allocate investment transactions and (iv) means for communicating the updated credit limit. The above-mentioned elements and their interconnections were also described and found acceptable in Johnston, Toma and Phillips.

Similarly, the instant claims, as amended, now recite statutorily acceptable structural elements because they are as specific with regard to the recitation of computer structure as the Musmanno claims in describing the computer program, its operations, and the computer structure necessary to implement that program and operations. In particular, claim 1 has been amended to include "entry means" for entering the required information, "a memory" for storing and the gathered information, and a "communicating means" for communicating relevant information. The interconnections of the various elements have also been more clearly indicated. The amendments made to claim 1, therefore, bring it in line with claims that have been accepted in prior patent applications for computer systems, such as in the Musmanno patent, and in line with the requirements of 35 U.S.C. § 101 as enunciated in the Paine, Webber, Johnston, Toma and Phillips cases, none of which were cited of record. This amended claim, as well as all added claims, should also make

it clear that the invention envisions a computer system for implementing a business method rather than a method of doing business.

Since the computer program of the current invention appears to have the same effect on the computer as contemplated and considered patentable in prior cases, reconsideration and an indication of the allowability of the claims as amended is respectfully requested.

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by DeTore et al. This rejection is respectfully traversed.

DeTore discloses a risk evaluation system for life insurance where computer software automatically provides evaluation data for policy classification by relying upon underwriting information and assigning weights to problem issues to determine a risk classification. However, DeTore only focuses on evaluating existing medical problems. It cannot take into consideration lifestyle data as recited in the instant claims. Furthermore, DeTore only evaluates risks as they pertain to life insurance but cannot make determinations relevant to health insurance. Likewise, DeTore fails to provide a basis for determining the effect of lifestyle choices on health insurance

coverage. Finally, DeTore fails to analyze and then provide a user with suggestions for improving his or her health.

For the reasons stated above, and other, DeTore does not teach or suggest the features of the present invention and the rejection under 35 U.S.C. § 102(b) has been overcome and should be withdrawn.

Acceptance of this application including claims 1 - 10 is solicited. In the event that the Examiner has any questions pertaining to this Amendment or the related remarks, in particular, or to this application in general, please telephone the undersigned attorney so that prosecution of this application may be expedited.

Respectfully submitted,

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